



UNITED STATES PATENT AND TRADEMARK OFFICE

A/b

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/772,259	12/23/1996	KAYOKO MASAKI	1185.1018/JD	5740

21171 7590 08/01/2002

STAAS & HALSEY LLP
700 11TH STREET, NW
SUITE 500
WASHINGTON, DC 20001

EXAMINER

NGUYEN, THONG Q

ART UNIT	PAPER NUMBER
----------	--------------

2872

DATE MAILED: 08/01/2002

36

Please find below and/or attached an Office communication concerning this application or proceeding.

1A

Office Action Summary	Application No.	Applicant(s)
	08/772,259	MASAKI ET AL.
	Examiner Thong Q. Nguyen	Art Unit 2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 April 2002 and 17 May 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 4-7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 4-7 and 9-11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the communication (Paper No. 33) of 4/16/2002 and the amendment (Paper No. 34) of 5/17/2002.

It is noted that as a result of the cancellation made by applicant in Paper No. 34, the present application now contains claims 4-7 and 9-11.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 4-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art described at pages 1-5 and illustrated in figures 11-12 in view of Ishikawa et al (Patent No. 5,600,455, of record).

The optical device as provided by the prior art which is described in the present specification at pages 1-5 and illustrated in figs. 11-12 comprises 1) a light source apparatus having a lamp (7) and a reflector (8); 2) a light guide plate (2) having a light entrance surface (T) for receiving light from the light source apparatus, an inclined bottom surface decreasing away from the light entrance surface, and an exit surface opposite and spaced from the inclined bottom surface; 3) a reflecting plate (4) disposed adjacent to the inclined bottom surface of the light guide plate (2); and 4) a light control plate (5) having an emitting surface and an entrance surface having a prismatic configuration which entrance surface faces the exit surface of the light guide plate (2). It is also noted that the light control plate (5) comprises the following features: First, the

Art Unit: 2872

prismatic configuration comprises a plurality of triangular-shaped projections which are extended in one common direction and repeatedly arranged in a direction perpendicular to the mentioned common direction; and second, the emitting surface of the light control plate is spaced from the entrance surface of the light control plate as can be seen in figures 11-12.

As a result of such a structure, the optical device of the prior art meets almost the structure of the device as claimed in the present application. However, the optical device of the prior art does not disclose that only part of the slopes of each prism of the prismatic configuration of the light control plate defines a diffusing surface for the purpose of generating diffused light in a substantially uniform manner and simultaneously reducing the effects of the reflecting plate.

The use of a light control plate having a prismatic configuration wherein only part of the slopes of each prism constituting the prismatic configuration is made as a roughed surface which defines a diffusing surface is disclosed in the art as can be seen in the light control device disclosed by Ishikawa et al. In particular, Ishikawa et al disclose a light control plate and teach the use of a light diffusing profile on a prismatic surface. The roughened pattern formed on one slope of each triangular-shaped projection as provided by Ishikawa et al will diffuse the light passing through the projection. See column 3 and figure 7. It is also noted that the formation of only one part of the slopes of each prism as suggested by Ishikawa et al is for the purpose of providing a uniform pattern of light in comparison with the use of prismatic configuration of the prior art. See columns 1-2 and figures 1-5 in which Ishikawa et al disclose that

Art Unit: 2872

since the slope(s) of each prism of the prismatic configuration is/are not sloped; therefore, the optical device of the prior art does not provide a uniform pattern when the view of an observer is angled with respect to the optical device. The formation of coarse surface on at least one part of the slope of each prism as suggested by Ishikawa et al will overcome the disadvantages of the prior art while providing a uniform pattern of illumination. See Ishikawa et al, column 3.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device having a means in the form of a prismatic configuration formed on the entrance surface of a light control plate as provided by the prior art by making only part or one side of each prism of the prismatic configuration as a roughed surface as suggested by Ishikawa et al for the purpose of controlling diffusing light with substantially uniform manner. It is also noted that while Ishikawa et al do not clearly state that the formation of roughed surfaces in the prismatic configuration of the light control plate will reduce the effects of the reflecting member; however, such use of roughed surface on only one slope of each prism of the prismatic configuration as suggested by Ishikawa et al will make the conventional device described in pages 1-5 and shown in figures 11-12 have a structure which is very similar to that of the device as claimed; therefore, it is expected that the combined product will yield the same result, i.e., reduction the effects of the light reflecting plate used in the device.

Response to Arguments

4. Applicant's arguments provided in Paper Nos. 34 and 35 filed on 4/16/2002 and 5/17/2002, respectfully, have been fully considered but are not persuasive. In regard to applicant's arguments as provided in the two mentioned papers, the Examiner offers the following opinions.

First, in response to applicant's arguments against the references individually, i.e., applicant's arguments concerning the art of Ishikawa et al, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. The test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Second, the art of Ishikawa et al is directed to a surface light source device having a light control member with a prismatic configuration formed on one surface thereof. Applicant should note that while Ishikawa et al disclose the advantage, i.e., the reduction of the stripe pattern, of use a light control member with one slope of the prism is coursed/roughed with that of the prior art disclosed in their Patent, it does not mean that applicant can forget or refuse the important feature disclosed by Ishikawa et al. In particular, ***the important thing disclosed/suggested to one skilled in the art made by Ishikawa et al is that they teach that one of the two slopes constituting each of the prism/projection is roughed/roughed for the purpose of providing a more uniform in light distribution after light passing such a prism.***

Third, the art of Ishikawa et al is used in combination with the surface light source device of the prior art described in pages 1-5 and shown in figures 11-12 of the present application, and the combined product provided by the prior art and Ishikawa et al will provide a result of reduction in the effect of the reflector in the surface light source device.

Fourth, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the obviousness is established by the knowledge generally available to one of ordinary skill in the art for the following reasons.

- a) *The arrangement of all optical elements used to constitute the light source device of the prior art, see pages 1-5 and figures 11-12 of the present application, is identical to that of the device claimed except the use of the roughed configuration on one slope of each prism of the prismatic pattern. In other words, the use of a light control member with the prismatic surface facing the light guide of the prior art is similar to that of the device claimed.*

Art Unit: 2872

b) The formation of roughed configuration on one slope of each prism of a prismatic pattern formed on one surface of a light control member in a surface light source device is clearly suggested to one skilled in the art by Ishikawa et al will improve the uniform manner of light distribution.

c) The art of Ishikawa et al and the art of the prior art are in the same field of endeavor.

Thus, it would have been obvious to one skilled in the art to utilize the teaching provided by Ishikawa et al to modify the surface light source device of the prior art for the purpose of providing a more uniform in light distribution

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

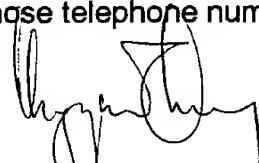
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (703)

Art Unit: 2872

308-4814. The examiner can normally be reached on M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
Art Unit 2872

July 30, 2002